



U.S. NAVY



LIVING JOINTNESS

by WILLIAM A. OWENS

U.S. Navy (Jeff Elliott)

USS Iowa firing
16-inch guns.



U.S. Navy

Summary

There are two competing views of jointness in vogue. One is *specialization* which argues that the services should stick to the roles for which they were established. The other is *synergism* which holds that military capabilities of various services should be blended in response to a given crisis or contingency. In the former view the capabilities preexist while in the latter they must be cobbled together on an ad hoc basis. Neither view has gained ascendancy thus far, but the Armed Forces must define the practical meaning of joint operations and then adopt it as second nature. The Navy and Marine Corps should embrace synergism because it enshrines enabling, a concept advanced in "... From the Sea." If tested synergism is the most compelling view since it draws on common ground which the services have developed through joint exercises, operations, and war games.

Joint operations are taken almost as a given in Pentagon pronouncements and it is virtually impossible to find anyone who professes to be against them. The unanimity with which they are endorsed, however, is not supported by an in-depth, well-articulated grasp of what joint operations are or how to conduct them. There are some areas of agreement. By definition, joint operations involve more than one service component, and most professional officers would argue, I think, that the fundamental reason for having joint operations is to increase overall combat effectiveness.

Competing Views

Beneath these common understandings, however, there are at least two competing views of how different force components should be used to increase combat effectiveness. One view argues in favor of using the best qualified force component for a given mission which implies that overall combat effectiveness can be best enhanced by fitting forces to missions for which they are specialized. Let's call this view the specialization argument. The other claims that higher combat effectiveness is made possible by combining forces in such a way that

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higher outputs result than could be achieved by simply adding the outputs of different forces. Let's call this the synergism argument. These views don't really represent two sides of the same jointness coin, and accepting one or the other ultimately leads to differing operational behavior and force structures.

Discussions of joint operations often refer to a toolbox analogy which entails an admonition to consider all the forces available to a joint commander as if they were the contents of a toolbox. In this analogy a joint force commander can pull the forces needed to do the job from the toolbox, regardless of whether the tools bear the markings of the Army, Navy, Marine Corps, or Air Force.

An advocate of what I called the specialization view of joint operations would say that the toolbox analogy is exactly right and explain that a joint commander turns to the box and chooses the right tool for the job. For instance, if required to plan and conduct a strategic bombardment campaign, the joint commander would assign the missions to the force component that knows the most about strategic bombardment campaigns—perhaps to the Air Force. An advocate of what I termed synergism would also say the toolbox analogy was exactly right. But he would explain that a joint commander would put together the right tool out of various force components. Then if a job required strategic bombardment the air assets available from all services would be combined in the most productive way by a joint commander.

The operational implications of these two views, I suggest, vary greatly so far as the use of force is concerned. The essence of



101st Airborne Division
convoy during Desert
Storm.

U.S. Army

specialization is to clearly differentiate combat responsibilities along force specialty lines and break out missions by service components while that of synergism is almost the opposite, at least with respect to mission assignments. Specialization takes advantage of inherent efficiencies in the integrated traditions, doctrines, discipline, and procedures of a single service; synergism blends particular service strengths on a mission basis to provide higher combat output than either any single service or the sum of individual service contributions could produce.

Each view leads down a separate path of logic and to a different practical understanding of joint operations. Specialization, for example, ultimately argues in favor of a command and control system that keeps the responsibilities and operations of various service components distinct and separate. Interaction among service components, according to this view, should be concerned with maintaining distinctions and keeping lines of responsibility from overlapping, for operational clarity will keep components from getting in each other's way and allow them to carry out their particular specialty with greatest effectiveness. There is synergism also in this approach, for if each service component meets the demands of its particular mission, the result will be an effective, smoothly conducted war or operation. That is, if Air Force, Navy, and Army components focus on air, sea, and ground campaigns respectively, the overall operation will benefit. Air Force resources will not be diluted by allocating sorties to support Army ground operations, Navy resources will not be stretched between providing gunfire support to the ground campaign and destroying an opponent's naval forces, and Army resources will not be diverted to protect Navy or Air Force bases. Is this an exaggerated extension of the inherent logic of this view? Yes. But it is essentially the logic that girds spirited defenses which each service makes in justifying its own aircraft, communications, and logistics systems.

The logical extension of synergism generates similar problems of unreasonableness. When pushed to the extreme, for example, it not only erodes individual service traditions, doctrines, and procedures, but ultimately argues in favor of unification and differentiating among forces strictly in terms of functional capabilities. However rational such a

Admiral William A. Owens, USN, has been nominated to be Vice Chairman of the Joint Chiefs of Staff. He has most recently served as Deputy Chief of Naval Operations for Resources, Warfare Requirements and Assessments. Previously he commanded the Sixth Fleet and NATO Naval Striking and Support Forces Southern Europe.

F-117 Stealth Fighter.



Lockheed (Schulzinger and Lombard)

conclusion might be, of course, going too far could undercut recruiting, training, and preparing men and women who make up the force as suggested by the Canadian experience with unification.

I have exaggerated both arguments to point out the differences between them. In the real world the contrast is not as dramatic, and as Operation Desert Storm demonstrated the use of force in an actual conflict is likely to involve aspects of specialization and synergism. But it is important to note that two potentially divergent views of joint operations underlie the discussion. Neither has as yet prevailed, though both have legitimate claims on our understanding of jointness. This leads me to make two suggestions.

Practical Meaning

My first suggestion is to promote day-to-day activities by the forces of all services which will work out a practical balance between the two views of jointness. The Armed Forces, in large measure due to the active interest of General Colin Powell in developing an in-depth understanding of joint operations, has come a long way in this regard over the last several years. There are more joint exercises being conducted today than at any other time since the end of World War II.

It's hard to argue, however, that there will ever be too many. More importantly, I think we have to go further in trying to work out the practical meaning of jointness

and in defining where the right balance really lies between specialization and synergism. In short, we must step beyond the idea of joint exercises toward operating jointly on a continual basis. This goal challenges both the current joint command structure and the peacetime activities of all services other than participation in joint exercises. It challenges the existing joint command structure because it argues for creating standing joint commands (as opposed to joint task forces) at the tactical level, the level of command most often engaged in actual war fighting—that is at corps, numbered fleet, and numbered air force level. Currently joint commands do not extend to this level. While joint task force commands do, they are almost always formed for specific operations. What I am suggesting here, however, is what might be called standing joint force commands at the regional three-star level, maintaining direct operational command over units of each service that normally would only be part of an identifiable joint command in a particular operation or crisis.

An Interim Understanding

The practical meaning of jointness is derived essentially from promoting joint exercises and joint operations, and will emerge as operational forces work out the myriad aspects of what joint operations entail. The military does not, however, have the luxury of not thinking about what joint operations should be until all the details are worked out. We in the Navy, in particular, are in need of a non-rhetorical definition of what joint operations imply, because we have committed ourselves to them both in the way we expect to use naval forces and in the designing, structuring, and sizing of naval forces for the future. We have stated formally in documents such as "... From the Sea" that the primary role of naval forces is to "enable joint operations in littoral areas," and we have informed Congress and the

American people that we will build a Navy that is better able to do this.

To return to the distinction between the two notions of jointness, the Navy ought to line up behind synergism because this view is far more compatible with the concept of enabling.

Enabling Joint Operations

Some have argued that enabling is something temporal in character, referring primarily to the ability of forward deployed naval forces to be the first on the scene in a crisis; and if the crisis cannot be contained, to secure beach heads and prepare for the arrival of ground and ground-based air power. Once accomplished, according to this argument, naval forces fight alongside the other forces and—after the objectives of the operation are achieved and the ground and ground-based air power withdraw—cover the post-conflict period. I think this is an important part of what the Navy ought to mean by enabling.

But there is more to it. I believe the concept of enabling ought to extend throughout these stages, and that naval forces ought to operate continually with the purpose of aiding and facilitating operations of the other service components that will be involved in conflict. We ought to operate naturally in such a way that we help the Army do what armies must do, and assist the Air Force in doing what it must do. This does not posit a subordinate or unique role for naval forces. The Air Force and Army also ought to add this concept of enabling to their operations. And it does not mean the Navy can or should abandon its classical conflict focus on control of the seas, even if the seas are most likely to be the littorals of the world for the foreseeable future. But, for the Navy, it means coming to appreciate the priorities of conflict and peacetime operations from the perspectives of the other services and acting accordingly.

To illustrate this point, I would like to suggest how naval forces could enable some basic concerns of the Army and Air Force, respectively, in littoral warfare. My example for the Army is taken from what military

planners are wrestling with as the Army develops its expeditionary force concept and that for the Air Force deals with something long near and dear to air power theorists—strategic bombardment.

Building Ground Power

Recognizing changes in the world, and particularly the likelihood of fighting where there are no prior overseas deployments, the Army has been developing an understanding of expeditionary warfare. This is not the place to discuss the emerging concept in any detail,¹ but one key aspect is the need for a sequential, rapid build-up of power in the region in which conflicts will occur. Briefly, the Army's answer to the problem of fielding overwhelming, combined arms force rapidly in a potentially hostile environment focuses on deploying units in a logical sequence; those arriving early would be charged with and capable of both preparing for the arrival of larger, heavier units logistically and protecting their arrival. Thus, the Army normally plans for the early deployment of units that can protect themselves and provide air and ballistic missile defenses.

The sequential approach to the buildup of power has long been a central tenant of the Army view of expeditionary warfare, and the Army has long recognized the inherent tension between building its strength sequentially and in a defensible manner, and doing this rapidly. It takes time for units that arrive initially to get in place, and the rate at which following units can arrive and take up their places is a function of available lift and reception capabilities. Airlift, the fastest way to deliver forces, will always be constrained by the capacity to provide all the things everyone wants in the theater of operations early. And such constraints delay the rate of building ground power.

The Navy's role in assisting the build-up of Army power has traditionally been reflected in terms of how fast weapons and materiel can be delivered to the intended debarkation points by sea. But there are other ways in which the Navy can cooperate to increase the rate of building up Army strength abroad. One is to provide or to cooperate in establishing air defense and ballistic missile defense screens that are a key early step in the Army build-up sequence. Another is to hold up the advance of enemy land forces

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U.S. Navy

by focused surveillance, intelligence, and fires from tactical aircraft, naval guns, and sea-based missiles, including Tomahawk land attack missiles and seaborne versions of the Army Tactical Missile System (ATACMS).

The agility of sea-based systems allows them to be deployed in such a way as to provide for the air and ballistic missile defense of any coastal area. Operationally, this can mean extending a defense umbrella over systems like the Patriot or Theater High Altitude Area Defense (THAAD), by protecting areas where land-based air and ballistic missile defense systems are established. In a regional conflict in which there is a premium on the rapid build-up of land-based forces, sea-based theater defenses could be of particular benefit. This is because of the airlift required to transport a land-based defense system. Getting a THAAD battery in position to protect against missile attacks eats up airlift. And since a regional commander faced with a possible missile attack would want to establish a defense

against it as the first step of a deployment, airlifting a land-based system would eat up lift capabilities precisely when competing transport demands would be highest.

The sea-based system could ease competition for airlift in one of two ways: by providing a defensive umbrella to allow later introduction of a land-based system or by obviating the very need to deploy a land based system at all.

Cooperative Engagement and Forward Passes

But a more synergistic approach would be to deploy the fire control radar of the land based system and link them with the Aegis missiles off shore. The demanding airlift requirements to establish a land-based ballistic missile defense system are generated largely by what it takes to transport the missile and missile support components of systems like THAAD. Accordingly, transporting only the



F-16As taking off for Iraqi targets.

radar initially would ease the demands on airlift greatly when competition for it would be high. The basic idea would be to deploy an air and ballistic missile defense system that could use land-based radars to detect, track, and control missiles from the sea for the intercept.

Cuing and communications to support this forward pass concept are technically feasible. They would allow land-based acquisition and fire control radar, perhaps located at the extremities of the land coverage provided from the sea-based defense system (which is a function primarily of the range of fire control line-of-sight radar aboard the Aegis ship), to identify the "basket" into which the sea-based interceptors would be fired, and then to assume control of those missiles and direct destruction of incoming ballistic missiles or aircraft. In effect, this cooperative arrangement would extend the range at which the sea-based missile launching platform could destroy ballistic missiles while easing the early demands on airlift, thus allowing a more rapid introduction of other land and land-based air forces.

Enabling Strategic Bombing

The concept of strategic bombardment grew out of the search for ways to avoid the bloody horror of ground force attrition warfare. In its modern form, it is an intellectually compelling, well-articulated expression of the difference between decisive and overwhelming force. That is, one of the arguments running through the growing body of literature about strategic bombardment theory is that it is possible to defeat an opponent by focusing air power on the command, control, and logistics links between enemy leaders and their forces. Near simultaneous, relatively quick, and sustained destruction of such links, the argument goes, leads to the disintegration and paralysis of an opponent's operations. And precision guided munitions, coupled with rapid, comprehensive, systematic, and accurate target acquisition and battle damage assessment make this possible.² The bombing campaign

U.S. Navy (Franklin P. Call)

that can result from melding this argument to advanced military technology is an example of decisive force, as opposed to overwhelming force, since it attains war goals quickly without annihilating enemy forces.

The potential success of strategic bombing campaigns and validity of the theory supporting them are contentious, largely because many consider them an argument for shifting resources to the Air Force. While I believe such concerns are unwarranted, this is not the occasion to debate them. It is important, however, to note three fundamental points about strategic bombardment campaigns. First, whether called strategic bombardment campaigns or not, interest in bringing force to bear in the manner of strategic bombing is a key and integral part of the U.S. approach to conflict. Second, and because of this, the issue facing naval forces is not whether strategic bombing theory is totally correct but rather how best to contribute to successful strategic bombardment campaigns. Third, the answer to this question revolves around how the services operate together in conducting campaigns. Successful strategic bombing campaigns will be the product of joint operations—they will not be the purview of a single service.

Moreover, what does it mean to say that naval forces ought to enable a strategic bombing campaign, and in particular what should their relationship be with the Air Force? The answer in part lies in the keys to a successful strategic bombing campaign. Two of the most important are accurate, timely intelligence on an opponent's operational scheme as well as the key command and control nodes and links through which an operational scheme can be implemented, and a judicious, efficient use of all the military assets that can attack those potential targets.

Accurate, timely, and complete intelligence is the essential precondition of a successful strategic bombardment campaign, for if the wrong targets are struck and the nodes

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that are truly critical to an opponent's military operations are missed, then the tremendous potential leverage of precision guided munitions is nullified. As one Air Force manual states: "Air power is targeting, and targeting is intelligence." Many targets that become key to strategic bombing are discernible long before an opponent embarks on aggression. They are embedded in the national infrastructure, and many of them—roads, bridges, and communications towers relied upon to conduct military operations—are truly fixed targets. They don't change or move during the bombing campaign. But effective targeting depends on knowing which potential targets are important and where nodes critical to an opponent are when operations begin. That's harder. Knowledge depends profoundly on surveillance and intelligence generated before a conflict, and on the capacity, once hostilities start, to keep track of both efforts to destroy vital nodes and an opponent's efforts to overcome or circumvent our bombardment.

No single service can do this alone. The problem is too complex and demanding. It can be done jointly, however, by all force components working together to collect, process, analyze, and disseminate the necessary information. And the contribution of naval forces will be essential, for they are the most likely to be on the scene providing surveillance and intelligence before, during, and after strategic bombing campaigns. They can do this with a broad range of platforms available to them, from submarines which gather information covertly, to surface platforms which gather the entire spectrum of signals intelligence, to aircraft (manned and unmanned), and to personnel on the ground. And, tied into the nets through which other sources of information flow, they can provide on-scene intelligence and assessments which are key to effective targeting.

Judicious and efficient use of attack assets is another necessary component of successful strategic bombardment. Efficiency stems in part from good targeting—picking the key targets and destroying them when it will have the greatest effect. But this also involves getting the destructive output needed from each of the attack assets committed to the campaign. And that is a function of close coordination with supporting and participating forces.



U.S. Navy (Chad Vann)

Stealthy B-2 bombers and F-117 attack aircraft are effective, deadly, and efficient assets. Their stealth enables them to be used in areas where an opponent has heavy anti-aircraft defenses and, since they are highly survivable, the aircraft and their pilots can be employed again and again. With precision guided munitions, they can destroy virtually any target in a single sortie. But their effectiveness is even greater when they are employed with diversionary attacks by aircraft which can be provided by naval forces, when air defenses are suppressed by manned or unmanned assets such as naval attack or electronic warfare aircraft and cruise missiles, when provided with real-time target updating from naval manned and unmanned aircraft, and when it is necessary to rescue pilots which in some cases may only be possible by using naval forces in the theater.

The efficient use of attack assets also means that the strategic bombing campaign should not be limited by the vagaries of weather or by the fact that daylight erodes the stealth characteristics of aircraft like the B-2 or F-117. That is, the success of a strategic bombing campaign depends on severing many links in an opponent's command and control system more or less simultaneously, and keeping them severed for an extended period. This simply cannot be done by attacking only at night and, given that the leverage offered by stealth is greatest at night, it means other aircraft must conduct the campaign during the day. Against heavily defended targets the most effective weapon in daylight is likely to be the sea-based Tomahawk land attack missile.

Finally, efficient use of attack assets in some cases means that they should not be

diverted to air defense missions and that their overall efficiency depends on the air defense security. In the aftermath of Desert Storm there was considerable debate over the extent to which naval aviation contributed to the success of the strategic bombardment campaign against Iraq. A great deal of the discussion was narrow-minded because it focused on how many precision guided munitions were used by Air Force and Navy aircraft respectively, along with similar bean counts which missed the bigger picture. One reason Air Force tactical fighters were so effective in bombing missions, for instance, was because the Navy controlled the air space over the Gulf. If this had not been the case the Air Force would have had to divert aircraft from striking targets to air defense missions. This is the kind of synergism that often gets overlooked. It is, however, a prime example of how naval aircraft enabled Air Force aircraft to contribute to the air campaign in the Persian Gulf War.

The key to success in strategic bombardment campaigns is the effective use of precision guided munitions, which depends in the first instance on coordinated, focused surveillance and intelligence. And that is best achieved by blending capabilities from all service components with the special perspective of national space-based assets.

It means practical, operational links between Air Force assets like Rivet Joint RC-135s that provide electronic surveillance and reconnaissance with similar platforms provided by naval forces like the EP-3s and ES-3s. Together, these assets can provide a better electronic map of an opponent and his forces than either can do separately. It also means tying together the tactical assets of two force components. Air Force and Navy manned and unmanned vehicles can provide a far better, more comprehensive picture of the campaign than either one operating on its own. This means coordinated planning which brings people together in the same way they do for joint war games, seminars, and day-to-day operations by second nature.

Which brings me back to the central point. The question of whether joint operations are desirable has been resolved for some time. Everyone agrees that they are here to stay and should stay fundamentally because

they increase the efficiency by which the Nation uses military power. The outstanding question is what jointness means in a practical sense which can be resolved only through experience—by experimentation, doctrinal development, and military exercises. But we should not kid ourselves. While the trends are favorable, we have a way to go before we can claim to have made the transition from rhetoric to reality insofar as jointness is concerned. To complete this important transition we will have to keep pushing, for making joint operations second nature to the Armed Forces means continued innovation, probable organizational changes, and a deep sense that operating jointly is the way things ought to be.

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NOTES

¹ The Army provides ample references. See, for example, Gordon R. Sullivan, "Moving into the 21st Century: America's Army and Modernization," *Military Review*, vol. 73, no. 7 (July 1993), and "Projecting Strategic Land Combat Power," *Joint Force Quarterly*, no. 1 (Summer 1993).

² See Buster C. Glossen, "The Impact of Precision Weapons on Air Combat Operations," *Aipower Journal*, vol. 7, no. 2 (Summer 1993).

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